ISSUE SUMMARY: CARIBBEAN SOLID WASTE ISSUES

Territory of the U.S. Virgin Islands (USVI): The Territory generates considerable amounts of solid waste, but has only two operating landfills, Bovoni landfill on St. Thomas and Anguilla landfill on St. Croix. Anguilla is over capacity, Bovoni is nearing capacity, and there are no confirmed plans underway to address the existing capacity issues. In addition, recent hurricanes have generated significant amounts of disaster debris, which have overstrained the waste management system further. EPA is working closely with the USVI Government to address solid waste compliance and capacity issues, both from an enforcement and programmatic perspective. EPA is overseeing \$10 million in supplemental disaster recovery funds intended to assist the USVI in its solid waste recovery efforts to address the damages caused by Hurricanes Irma and Maria in 2017. In addition, EPA is coordinating with the USVI Government to access an additional \$200 million in federal funds from FEMA, HUD, USDA, DOI, and EDA to help address its solid waste capacity issues.

Commonwealth of Puerto Rico (PR): Despite receiving program approval from EPA in 1994, PR's Solid Waste Management Program fails to meet the minimum federal program requirements. Non-comprehensive and decentralized planning, disposal facilities operating in violation of federal and local statutes, insufficient staff, and a lack of enforcement by the PR Department of Natural and Environmental Resources (DNER) have resulted in potential threats to human health and environment. The situation is exacerbated by the severe financial crisis faced by the Commonwealth of Puerto Rico and its municipalities and by the need to address the destruction caused by Hurricanes Irma and Maria and the recent series of earthquakes.

Since 2005, EPA Region 2 and, in several cases, the U.S. Department of Justice acting on EPA's behalf, have taken federal enforcement actions requiring 13 poorly designed, operated and maintained solid waste landfills to stop accepting waste and twelve landfills to also close these facilities (which are essentially open dumps); and we have sought to improve operations and incentivize PR to implement a sustainable Solid Waste Management Program. Despite EPA's efforts, the Commonwealth has not addressed many of its program deficiencies, and compliance by some landfills with certain key provisions of federal rules and enforcement action requirements has been lacking. As of October 2020, several of these landfills are operating in violation of deadlines set in federal enforcement orders for permanently ceasing to accept waste, and several are in violation of deadlines for permanent closure.

UPCOMING MILESTONES:

USVI:

Hurricane Supplemental Funds: Ongoing milestones related to grant progress and deliverables.

PR:

November 6 – Public hearing on Solid Waste Regulations.

Hurricane Supplemental Funds: Ongoing milestones related to grant progress and deliverables.

BACKGROUND:

The Resource Conservation and Recovery Act (RCRA) Subtitle D establishes the framework for federal, state, and local government cooperation in the management of solid waste. Congress did not intend for EPA to manage state solid waste programs. The federal role is to establish the overall regulatory direction, provide minimum standards for protecting human health and the environment, and provide technical assistance to States for planning and developing sound waste management practices. The planning and direct implementation of solid waste programs remain state and local functions.

USVI

The USVI Government, through the Waste Management Authority (WMA), is responsible for the planning and operation of the solid waste management infrastructure in the USVI. There are currently two landfills located in the USVI: the Anguilla landfill in Saint Croix and the Bovoni landfill in Saint Thomas. The Anguilla landfill is over capacity and Bovoni is swiftly reaching capacity. Both landfills are subject to federal joint Clean Air Act and RCRA judicial Consent Decrees, entered in December 2012 and April 2013, respectively, being directly overseen by a federal judge with quarterly updates by EPA, DOJ, and the USVI Government. The Anguilla landfill has experienced recent major fires that have severely impacted its facilities and its Solid Waste/Sustainable Materials Management efforts. Despite the urgent need, there are no solid waste infrastructure projects underway to address existing landfill capacity and compliance issues. On the regulatory side, the USVI Department of Planning and Natural Resources (DPNR) received EPA's approval of its RCRA Subtitle D solid waste program in 2019, which is a critical step that will allow DPNR to permit new landfills and expand existing landfills in the Territory. EPA is currently working on helping DPNR develop capacity to implement its solid waste management program.

Coordination of Solid Waste and Hurricane Recovery Efforts: After the passing of Hurricane Irma and Maria in 2017, multiple sources of federal financial assistance became available to help affected jurisdictions, such as the USVI, recover from the consequences of the hurricanes. Some of this federal funding can be utilized by the USVI to address its solid waste needs. EPA is facilitating discussions between local and federal agencies to assist the USVI with accessing and coordinating approximately \$200 million of disaster recovery and mitigation funding primarily through HUD CDBG and FEMA. In addition, EPA awarded \$10 million in recovery supplemental funding to DPNR to implement solid waste recovery efforts; \$6 million of such funding was made available to WMA by DPNR.

PR

Puerto Rico received RCRA Subtitle D program approval in 1994. The Puerto Rico DNER is responsible for the implementation of the regulatory and planning components of the program. There are now 29 operating landfills in Puerto Rico, 18 of which still operate as open dumps and should have either been brought into compliance with the 40 CFR Part 258 federal requirements, or closed by October 1996. Most of the landfills are owned or operated by the municipalities, while a few are privately owned and operated.

Regulatory Adequacy: EPA's approval of Puerto Rico's solid waste program in 1994, relied upon regulations issued by PREQB in 1993 that were in conformance with federal requirements. However, in 1997, the PR Environmental Quality Board (PREQB) unilaterally promulgated regulations significantly less stringent than the minimum national criteria, without notifying EPA. Since becoming aware of these changes in 2003 during field inspections, EPA has invested considerable resources to compel PR to revise its regulations to be consistent with the federal standards. Regional staff have reviewed and commented on several iterations of PREQB's proposed revisions. At least four times over the last 15 years, acceptable revised versions of PR's solid waste regulations were submitted to EPA. PR only needed to promulgate the revisions in order to meet the minimum federal requirements but, for a variety of reasons, failed each time to take the necessary action. Most recently, DNER submitted acceptable revised solid waste regulations to EPA in 2019. The Region is now waiting for DNER to promulgate those changes. The harm posed by DNER's allowance of unlined expansion of open dumps cannot be fully rectified, and PREQB's removal of the financial assurance requirements for closure have significantly contributed to and resulted in a lack of available funds for proper landfill closure.

Infrastructure/Program Planning and Regulatory Oversight: PR has produced several long-range solid waste management plans since its 1994 Subtitle D program approval. None have been fully implemented, a likely result of ongoing turnover of personnel with each change in administrations, competing priorities for funding, and a lack of municipality buy-in. The last comprehensive solid waste management plan, titled Puerto Rico Dynamic Itinerary for Infrastructure Projects, was developed in 2007.

The Region is concerned about DNER's inadequate permitting and enforcement staff resources. In addition, there are only two operating facilities in PR that exclusively utilize lined disposal cells, while 10 other operating facilities utilize a combination of lined units and unlined disposal. It is difficult for these facilities to compete with the non-compliant facilities (i.e., open dumps) due to inequities in tipping fees, personnel and operational costs, and a lack of savings for closure costs by the non-compliant facilities. Recycling rates also remain low, largely due to the inappropriately low open dump disposal fees, resulting in minimal diversion of materials from the landfills. EPA is assisting DNER in implementing a strategic action plan to improve the Commonwealth's solid waste management.

Enforcement: The EPA has enforcement actions (including 2 judicial consent decrees) requiring 13 landfills to stop accepting waste, and improve operations, and 12 landfills to also ultimately close. Most of the actions also require comprehensive recycling programs. Compliance by some landfills with certain key provisions of these actions has been lacking, particularly by the municipally operated landfills. Three of the landfills under order are slated to close in 2021 but have failed to comply with earlier deadlines for permanent waste receipt cessation, and we are continuing close oversight.

Recovery Supplemental Funding: On September 30, 2019, EPA awarded \$6.3 million of the \$40 million available in supplemental funding to PR. The work is expected to take seven years and the grant work plan activities will be implemented in two phases. The initial phase of the supplemental work includes staffing PR's solid waste program, training and program development activities, such as conducting a waste characterization assessment and a market analysis and developing an integrated solid waste management plan (ISWMP). The ISWMP will include a disaster debris management plan and will also integrate a commodities market analysis. DNER has indicated that the information developed during the planning phase will inform the projects that will be funded with the remaining supplemental funding (\$33.7 million).

KEY EXTERNAL S	STAKEHOLDERS:
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□ Congress	\square Industry	\boxtimes States	\square Tribes	oxtimes Media	○ Other Federal Agency
⊠ NGO	X Loc	cal Governments	⊠ Ot	her	

Over the past several years, we have provided written responses or briefings for Representatives Gonzalez-Colon (PR), Ross (FL), Gutierrez (IL), and Grijalva (AZ), Senator Menendez (NJ), the Bi-partisan Congressional Task Force on Economic Growth in Puerto Rico, and majority counsel for the U.S. House of Representatives Energy and Commerce Committee, as well as, at HQ's request, the NGO Green Latinos. The concerns expressed include whether EPA is doing all it can, whether the Agency should "take over" the Commonwealth's PREQB's solid waste program, and what more can be done to assist municipalities to come into compliance.

MOVING FORWARD:

EPA will continue working closely with the Puerto Rico and the Virgin Islands, assisting in the development of a compliant solid waste management program and ensuring strategic use of the supplemental funding. Upgrading PR and the USVI's capabilities are essential to managing solid waste safely and sustainably. EPA's engagement with the PR and the USVI governments is focused on helping to advance the implementation of projects using supplemental funding and providing the basic organizational structure to accept and process applications for permitting new compliant landfill cells or to inspect existing landfills and close open dumps.

LEAD OFFICE/REGION: REGION 2

OTHER KEY OFFICES/REGIONS: